#### (19) World Intellectual Property Organization International Bureau



### 9 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1

## (43) International Publication Date 16 March 2006 (16.03.2006)

### **PCT**

# (10) International Publication Number WO 2006/028235 A1

(51) International Patent Classification':

G06F 7/58

(21) International Application Number:

PCT/JP2005/016686

(22) International Filing Date:

5 September 2005 (05.09.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2004-258186 6 September 2004 (06.09.2004)

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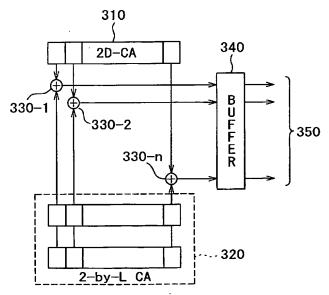
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW,
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR CELLULAR AUTOMATA BASED GENERATION OF PSEUDORANDOM SEQUENCES WITH CONTROLLABLE PERIOD



(57) Abstract: An object of the present invention is to provide a compact apparatus for generation of desired pseudorandom sequences with controllable period. An apparatus for generating pseudorandom sequences includes two-dimensional cellular automata 310 for generating a first sequence, 2-by-L cellular automata 320 for generating a second sequence, adders 330-1, 330-2, ..., 330-n for performing bit-to-bit mod2 sum of the first sequences and the second sequences, and a buffer 340 for buffering the resultant sequences from the adders 330-1, 330-2, ..., 330-n.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.